11

CLAIMS:

1.   Device for recording information in blocks having logical addresses in a
storage space on a record carrier, which device comprises
- recording means (22) for recording marks in a track on the record carrier representing the
information, and
5   - control means (20) for controlling the recording by locating each block at a physical address
in the track, the control means comprising
- interfacing means (31) for communicating with a host system by exchanging commands
and information,
- record carrier status means (32) for detecting a record carrier update status in which
10   information stored on the record carrier is to be changed, and
- update means (33) for initiating an unmount-mount sequence in dependence on the record
carrier update status, the unmount-mount sequence comprising an unmount process for, via
the interfacing means, forcing the host system to complete pending actions and write any
information maintained by the host to the record carrier, an update process for said changing
15   of information on the record carrier, and a mount process for, via the interfacing means,
forcing the host system to accept the changed information by retrieving from the updated
record carrier any information required by the host.

2.   Device as claimed in claim 1, wherein the update means (33) are adapted for
20   including in the update process changing the size of the storage space.

3.   Device as claimed in claim 1 or 2, wherein the control means (20) comprise
defect management means (34) for detecting defects and maintaining the defect management
information in defect management areas on the record carrier, and wherein the update means
25   (33) are adapted for including in the update process changing the content, size and/or location
of the defect management areas.

4.   Device as claimed in claim 3, wherein the defect management information at
least includes remapping information indicative for translating a logical address initially

12

mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area, and wherein the update means (33) are adapted for including in the update process changing the remapping information.

5.   Device as claimed in claim 1, wherein the record carrier status means (32) are for detecting a series of blocks having a continuous logical address range to be updated for recording in a corresponding contiguous physical address range.

6.   Device as claimed in claim 5, wherein the record carrier status means (32) are for detecting a continuous recording indicator in a recording command, or for detecting the series of blocks representing real-time information, in particular video information.

7.   Device as claimed in claim 1, wherein the update means (33) are adapted for including in the update process rewriting blocks that are part of a logically continuous series of blocks on substantially adjacent physical addresses.

8.   Device as claimed in claim 7, wherein the update means (33) are adapted for including in the update process adapting file management information.

9.   Device as claimed in claim 8, wherein the update means (33) are for detecting a free location on the record carrier,
for retrieving previously recorded blocks in a physical address range,
for recording said retrieved previously recorded blocks in the free location, and for updating file system information indicating the logical addresses of said retrieved previously recorded blocks as part of a file.

10.   Device as claimed in claim 1, wherein the update means (33) are adapted for including in the update process adapting record carrier format information, in particular the disc type or the version of the format of the recorded information.

11.   Device as claimed in claim 1, wherein the interfacing means (31) are adapted to include a command for a indicating a period of time required for the update process, in particular a conditional unmount request.

13

12.   Method of recording information, which method comprises recording
information in blocks having logical addresses in a storage space on a record carrier,
- controlling the recording by locating each block at a physical address in a track on the
record carrier,

5   - interfacing with a host system by exchanging commands and information,
- detecting a record carrier update status in which information stored on the record carrier is
to be changed,
- initiating an unmount-mount sequence in dependence on the record carrier update status, the
unmount-mount sequence comprising an unmount step for, via said interfacing, forcing the

10   host system to complete pending actions and write any information maintained by the host to
the record carrier, an update step for said changing of information on the record carrier, and a
mount step for, via said interfacing, forcing the host system to accept the changed
information by retrieving from the updated record carrier any information required by the
host.

15

13.   Computer program product for recording information, which program is
operative to cause a processor to perform the method as claimed in claim 12.